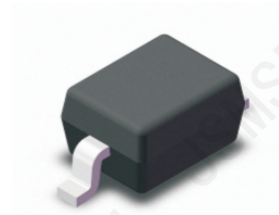


Features

- Extremely Fast Switching Speed
- Low Forward Voltage
- Pb-Free Package is Available


SOD-323
Top View 

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	30	V
Forward Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	
Non-Repetitive Peak Forward Current ($t < 1s$)	I_{FSM}	600	
Power Dissipation	P_d	200	mW
-Derate above 25°C		1.57	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 10\text{ uA}$	30			V
Forward voltage	V_F	$I_F = 0.1\text{ mA}$			0.24	
		$I_F = 1\text{ mA}$			0.32	
		$I_F = 10\text{ mA}$			0.4	
		$I_F = 30\text{ mA}$			0.5	
		$I_F = 100\text{ mA}$			0.8	
Reverse voltage leakage current	I_R	$V_R = 25\text{ V}$			2	μA
Junction capacitance	C_j	$V_R = 1\text{ V}, f = 1\text{ MHz}$			10	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10\text{ mA}, I_{R(REC)} = 1\text{ mA}$			5	ns

Typical Characteristics

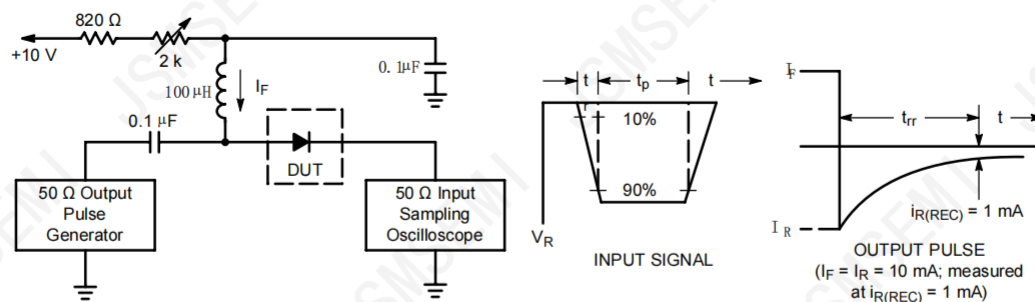


Figure 1. Recovery Time Equivalent Test Circuit

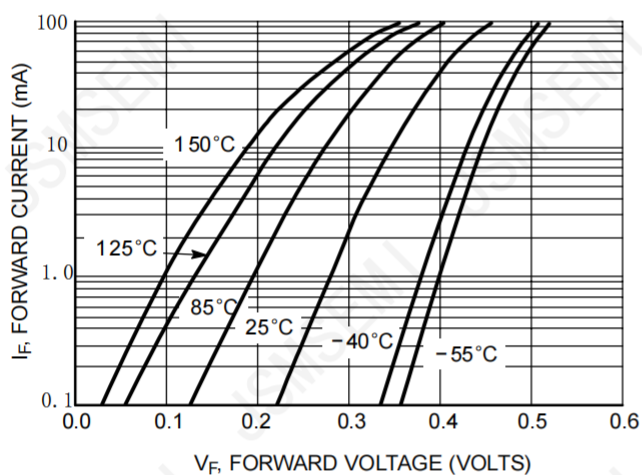


Figure 2. Forward Voltage

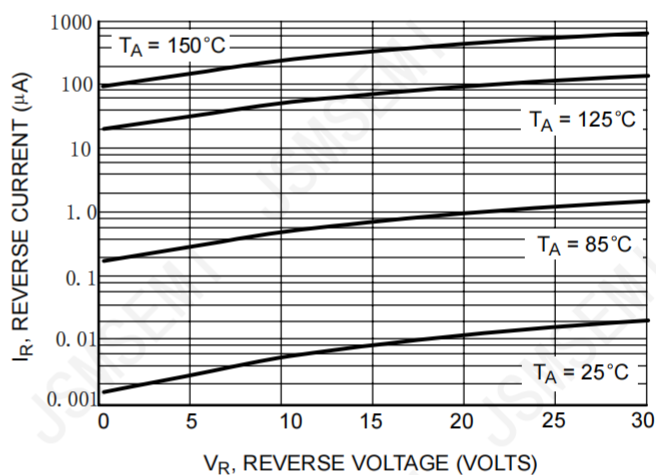


Figure 3. Leakage Current

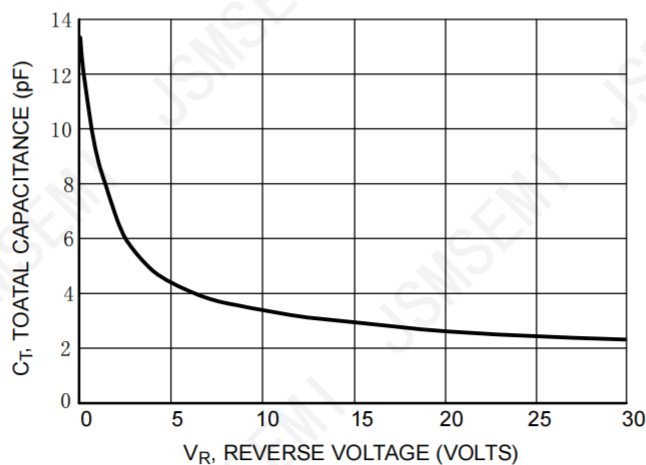
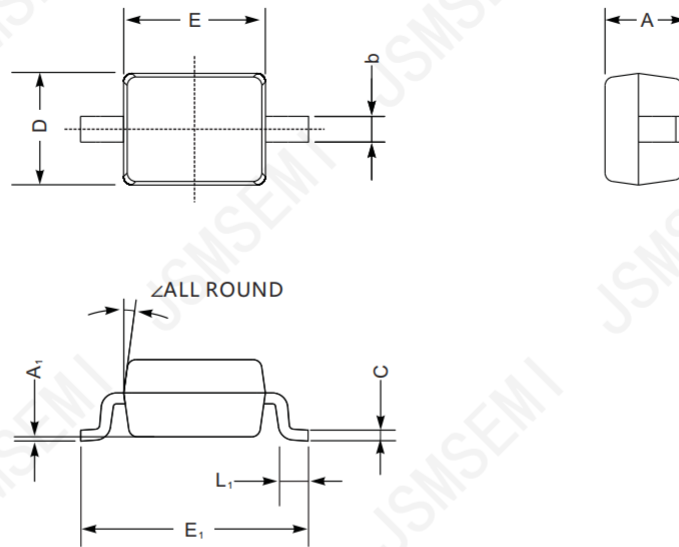


Figure 4. Total Capacitance

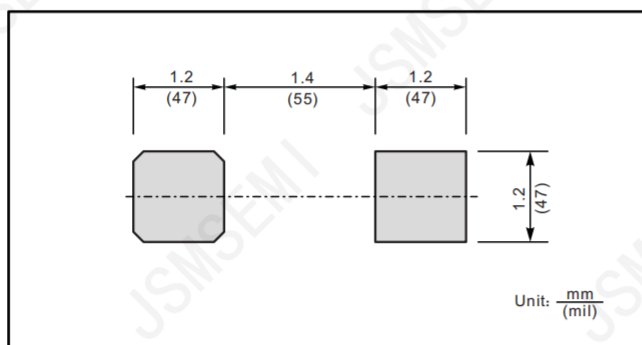
SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

The recommended mounting pad size



Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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